

Lessons learned from one of New Zealand's most challenging civil engineering projects: rebuilding the earthquake damaged pipes, roads, bridges and retaining walls in the city of Christchurch 2011 - 2016.

Commercial managers' presentation

Story: The Commercial Model

Theme: Finance and Business Systems

A detailed presentation prepared by SCIRT IST's commercial manager to inform Delivery Team commercial managers about the processes and requirements relating to SCIRT's commercial model.

This document has been provided as an example of a tool that might be useful for other organisations undertaking complex disaster recovery or infrastructure rebuild programmes.

For more information about this document, visit www.scirtlearninglegacy.org.nz



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NOP Delivery Team Commercial Manager Workshop 2

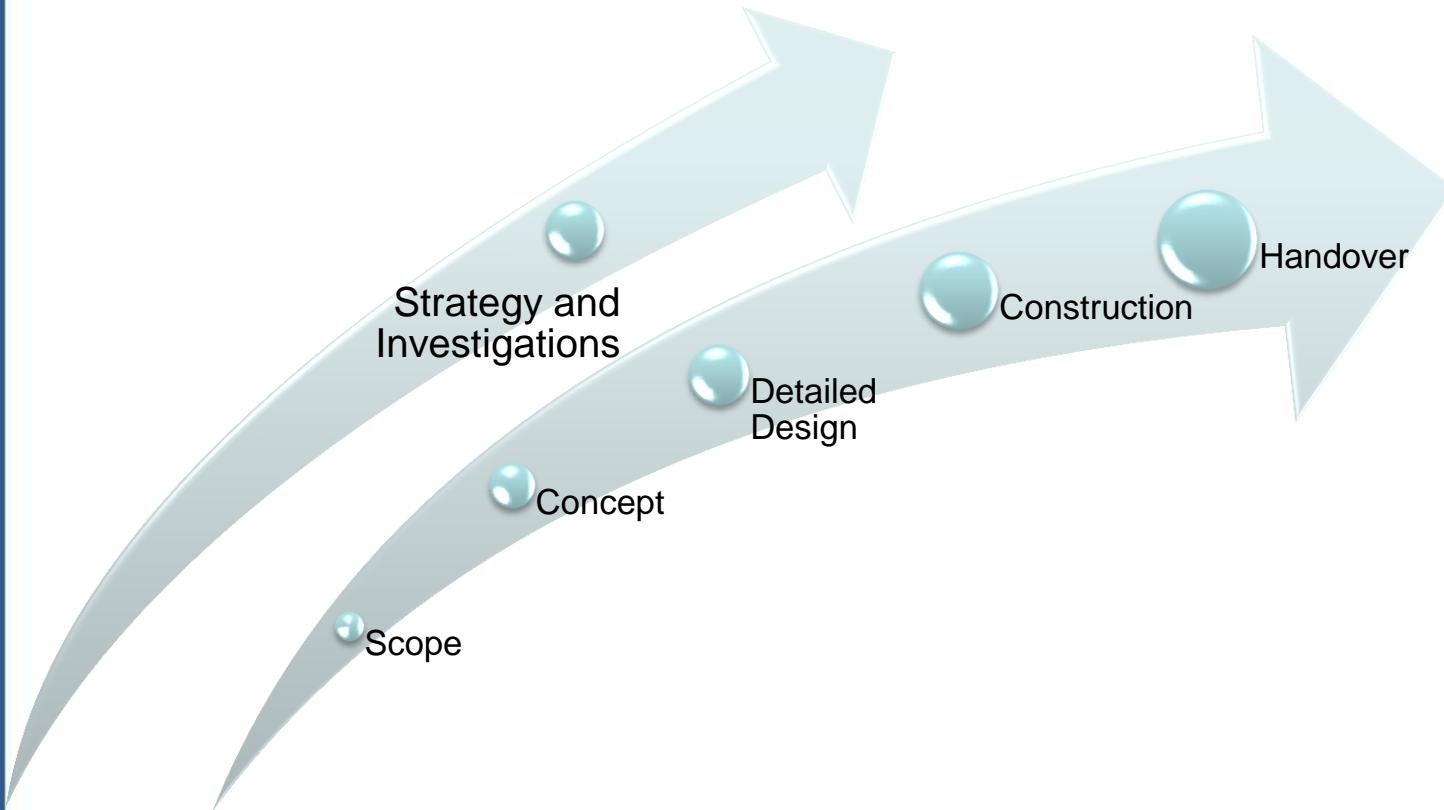
Processes and requirements

Commercial Managers

- Six parts to the presentation
 - The end-to-end process
 - Project governance
 - Coding Structure and information requirements
 - Project allocation
 - Reporting
 - Insurances

END-TO-END-PROCESS

End-To-End Process



STRATEGY AND INVESTIGATIONS

Strategy and Investigations

- In order to identify and prioritise tasks into projects, there needs to be a process to investigate issues and risks and develop strategies to give direction to the rebuild problem.



Strategy

- There is a need to take a long term view over many aspects of infrastructure replacement.
 - Red zones
 - Isolated assets
 - Resilience and redundancy
 - Innovation
- CERA and SCIRT are working on these strategies which will be released as they are adopted



Investigations

- As of 8th August 2011, SCIRT have been responsible for the investigation of all earthquake related horizontal infrastructure damage.
- Responsibility was handed over quickly and as such, it will take a little time to get properly organised
- Undergoing a process of gaining control
- Dedicated team to lead this work



Investigations

- A single point of accountability to organise;
 - CCTV
 - Surveyors
 - Physical inspections
 - Other data collection
- Using a single GIS database and team to capture and record all information
- Aim to be more efficient and effective



Investigation Claims

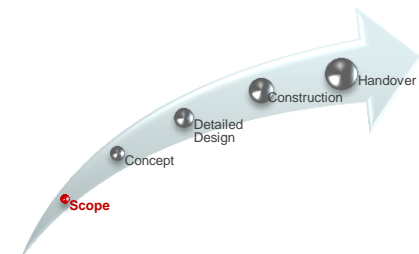
- Until SCIRT has full control of all investigations, the NOP Delivery Teams will continue to organise and manage these works.
- The NOP Delivery Teams will submit a claim as per the normal claim process – more later



PROJECT LIFECYCLE

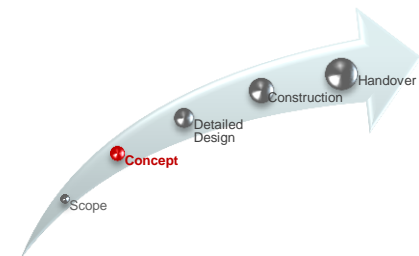
Scope

- Definition of a project
- Current view
 - Between \$1M and \$10M
 - Corridor approach
 - Sewerage sub-catchments
- Linking projects to individual assets



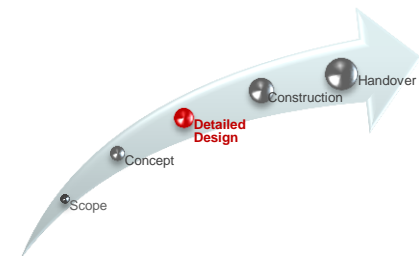
Concept Design

- Deciding how to fix the problem
- Dealing with whole of life costs
- Innovation
- Lessons learned
- Understanding strategy
- Updating standards



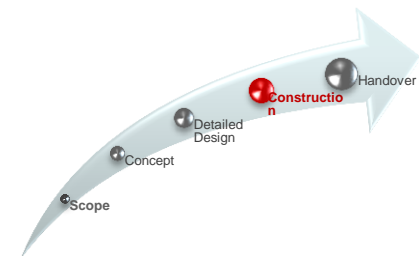
Detailed Design

- Drawings
- Specifications
- Bill of Quantities (BoQ)
- Total Out-turn Cost (TOC)
- Other project documentation



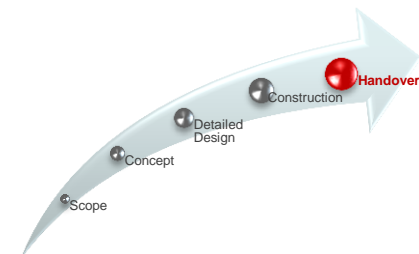
Construction

- Claims process – more later
- Programme resources
 - Stakeholder management
 - Consents
 - Health and Safety Standards
 - Environmental Standards
 - Quality standards
 - Reporting



Handover

- All project specific information and documentation to SCIRT and hence CCC
- As-builts
- Operational and Maintenance manuals
- Actual cost information
- Project completion report



PROJECT GOVERNANCE

Project Governance

- We have shown the high level project process to date
- When we address project governance, we actually need another level of detail
- Important for NOP Delivery Teams as it outlines the allocation process – more later

Project Governance

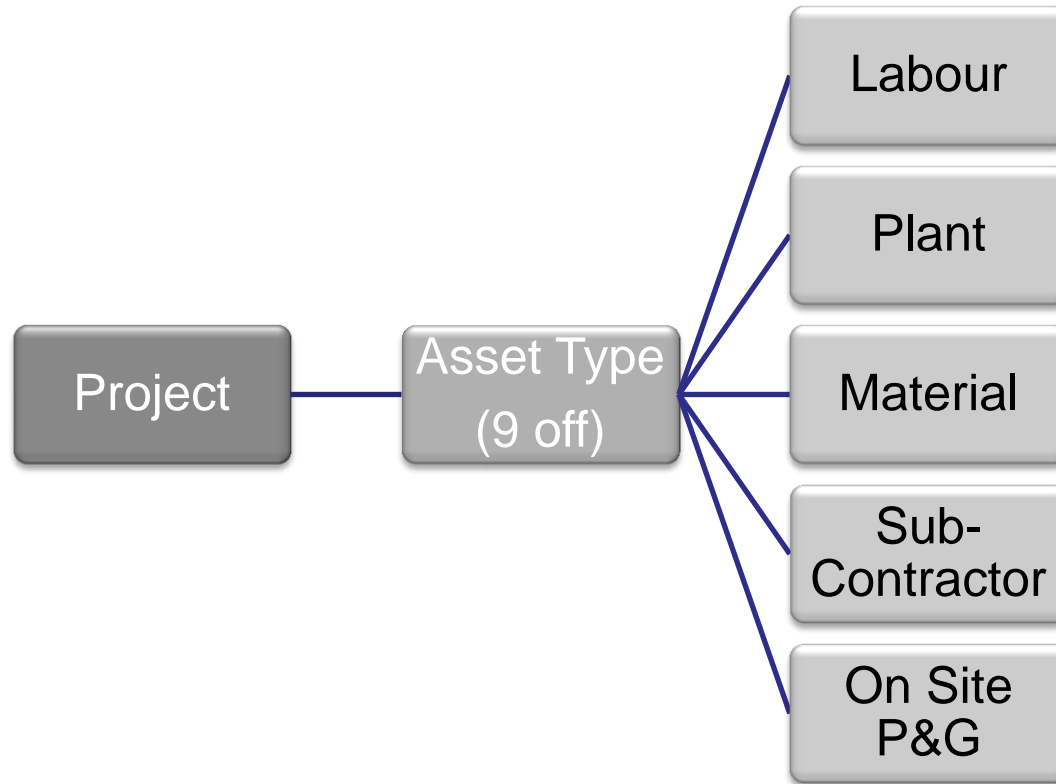
Estimate	Phase	Gateway	Responsible	Accountable	Consulted	Informed
± 15%	Scope	0	Project Definition Manager	Professional Services Manager	CCC, NZTA, Delivery Team	Alliance Manager
	Project Allocation Design	1	Business Systems Manager	Commercial Manager	Professional, Services, VFM	Alliance Manager
± 10%	Concept Design	2	Design Manager	Professional Services Manager	Asset Owner, ECI Delivery Manager	
	Detailed Design	3	Design Manager	Professional Services Manager	ECI	
TOC	TOC	4	Estimating Manager	Commercial Manager	VFM	Alliance Manager Delivery Manager
	Project Allocation Construction	5	Business Systems Manager	Commercial Manager	VFM	Alliance Manager
	Construction	6	Project Co-ordinator	Delivery Manager	Commercial Team, VFM	
AOC	Handover	7	Business Systems Manager	Commercial Manager	CCC	CCC
	Practical Completion	8	Alliance Manager	Alliance Leadership Team		CCC
	Project Completion	9	Alliance Manager	Alliance Leadership Team		CCC

CODING STRUCTURE

Coding Structure

- An overarching principle we have adopted is one of simplicity and necessity
- To comply with this, we have adopted a high level approach to capturing cost information pertaining to the construction phase.

Coding Structure



Coding Structure

- We will be collecting costs by asset type
 - Waste Water Reticulation
 - Waste Water Pump Stations
 - Water Supply Reticulation
 - Water Supply Pump & Reservoir Stations
 - Transport – Roding Local
 - Transport – Roding NZTA
 - Storm Water Reticulation
 - Storm Water Pump Stations
 - Parks

Coding Structure

- Under each asset type you will have to break costs down by
 - Labour
 - Plant
 - Materials
 - Sub-Contractors
 - On site P&G

INFORMATION REQUIREMENTS

Information Requirements

- All information required monthly for the programme
 - Number of staff employed
 - Number of certain types of plant employed

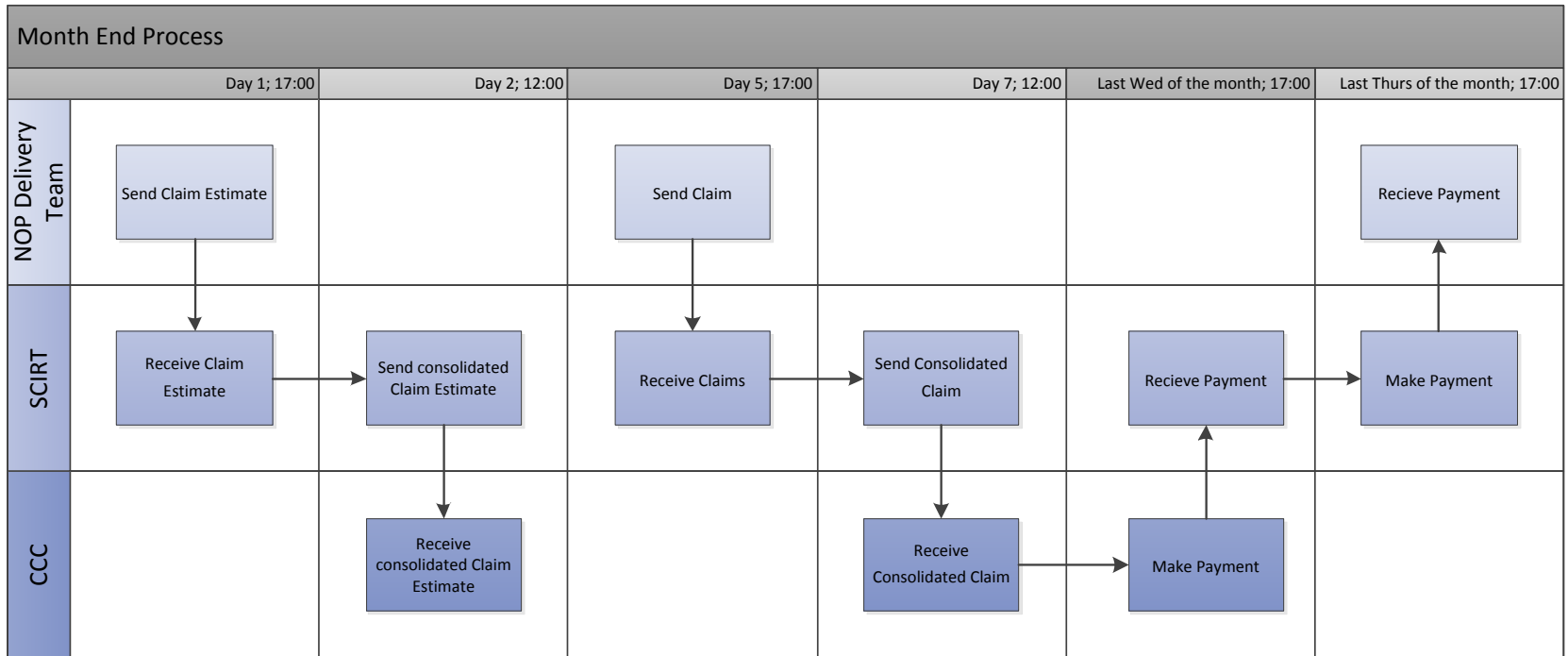
Information Requirements

- All information required for each project
 - Life to date costs by asset and activity
 - Number of man hours by asset type
 - Number of plant hours by asset type
 - Forecast cost to complete cash flow by month
 - Monthly update of Asta plan (time and quantity)

What do we do with the information

- SCIRT has been set some stretch goals by the ALT
- These goals are measured by the KRA and KPI framework
- All the information we gather is to report against these targets
- The KRAs and KPIs are also used in the allocation process – more later

Month End Process



PROJECT ALLOCATION

Project Allocation

- Project allocation dependant on two things
 - Financial performance
 - Non financial performance
- A framework uses to measure what is important to the success of the programme, what gets measured gets done.
- A transparent process that is rigorous and is ratified by the ALT

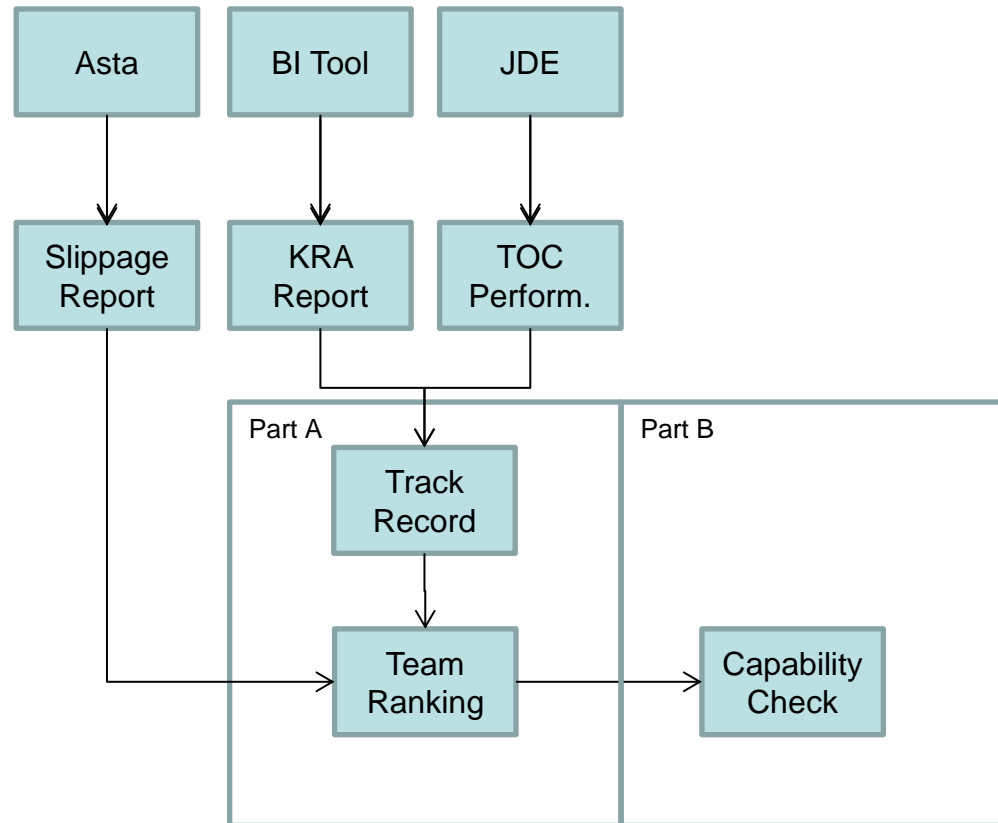
Financial Performance

- Financial performance is measured against TOC
- NOP Delivery teams that constantly deliver projects at a greater percentage under TOC than other NOP Delivery Teams, will be rewarded with a greater volume of work – but this is not the only factor that influences the share of work

Non Financial Performance

- The KRA and KPI framework outlines non-financial factors that effect work share.
 - Health and Safety
 - Quality and Environmental
 - Delivery to schedule (time)
 - Capability
 - Capacity
 - Collaboration

The Allocation Model



REPORTING

Reporting

- Rubbish in – rubbish out – an accurate axiom
- Principles
 - Consistent
 - Current
 - Correct
 - Corroborative
 - Do it once
- Heavy reliance on the information you supply

Reporting

- Do it once
 - The alliance will produce a suite of reports that will satisfy a number of stakeholders with different information needs
 - We will produce NOP Delivery Team Reports
 - So we can compare like for like
 - The alliance takes on the burden and expense – centralisation
 - Exception reporting
 - Context required about exceptions
 - No surprises

INSURANCE

Insurance

- Alliance along with CCC is in the process of procuring PI, PL and Contract Works insurance for all construction works and design
- Tension is on the hand over process
 - Practical completion certificate is only signed on completion of hand over process
 - Insurance transferred to CCC on signing of PCC
 - Vital to get hand over completed quickly

Transition – IRMO to SCIRT